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APPLICATION NO. FILING DATE		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/628,564 07/29/2003		07/29/2003	Karsten Schulz	13909-026002 / 2002P00222	4833	
32864	7590	07/27/2006 E			XAMINER	
FISH & R PO BOX 10		SON, P.C.	CHAVIS, JOHN Q			
		N 55440-1022	ART UNIT	PAPER NUMBER		
,				2193	<del></del>	
			DATE MAILED: 07/27/2006			

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary			Application N	0.	Applicant(s)					
			10/628,564 Examiner		SCHULZ ET AL.					
	•				Art Unit					
	The MAILING DATE of this communic	24'	John Chavis		2193	<del></del>				
Period fo	The MAILING DATE of this communic or Reply	аиоп арре	ears on the co	er sneet with the co	orresponaence aa	aress				
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FO CHEVER IS LONGER, FROM THE MA assistance of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this community period for reply is specified above, the maximum stature to reply within the set or extended period for reply with the set or extended period for reply	ILING DA 37 CFR 1.136 nication. Itory period will, by statute, o	TE OF THIS ( 6(a). In no event, he is apply and will explication	COMMUNICATION OWEVER, may a reply be tim  TE SIX (6) MONTHS from to become ABANDONEE	l. ely filed the mailing date of this co O (35 U.S.C. § 133).					
Status										
1)⊠	Responsive to communication(s) filed	on 29 Jul	lv 2003							
	Responsive to communication(s) filed on <u>29 July 2003</u> .  This action is <b>FINAL</b> . 2b)⊠ This action is non-final.									
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is									
٠,۵	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.									
Disposition of Claims										
	Claim(s) <u>1-32</u> is/are pending in the application.									
	4a) Of the above claim(s) is/are withdrawn from consideration.									
	Claim(s) is/are allowed.									
	Claim(s) 1-32 is/are rejected.									
	Claim(s) is/are objected to.									
8) Claim(s) are subject to restriction and/or election requirement.										
Applicati	on Papers									
9) 🗌 🤈	The specification is objected to by the	Examiner.								
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.										
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).										
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).										
11) 🗌	The oath or declaration is objected to b	by the Exa	miner. Note t	ne attached Office	Action or form PT	O-152.				
Priority u	nder 35 U.S.C. § 119									
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:										
	1. Certified copies of the priority documents have been received.									
	2. Certified copies of the priority documents have been received in Application No									
	3. Copies of the certified copies of the priority documents have been received in this National Stage									
application from the International Bureau (PCT Rule 17.2(a)).										
* See the attached detailed Office action for a list of the certified copies not received.										
Attachment	(s)									
1) Notice	e of References Cited (PTO-892)		4) [	Interview Summary (						
	e of Draftsperson's Patent Drawing Review (PTC nation Disclosure Statement(s) (PTO-1449 or PT		5) F	Paper No(s)/Mail Dat  Notice of Informal Pa		)-152)				
	No(s)/Mail Date <u>7/18/05</u> .	0/30/08)	· =	Other:	(Ppilodion (i 10					

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 2. Claims 1-32 are rejected under 35 U.S.C. 102(a) as being anticipated by Aissi et
- al. (E-Business Process Modeling...".

### What is claimed is:

1. A method of modifying an Abstraction level of a workflow, the Method comprising:

analyzing a workflow to determine a first plurality of tasks;

combining the first plurality of tasks into a first virtual task within an abstracted workflow; and

linking the first virtual task to the first plurality of tasks such that a virtual execution of the abstracted workflow corresponds to an actual execution of the workflow.

2. The method of claim 1 wherein the `

#### Aissi

Aissi provides for modifying an abstraction level via page 55 under the section entitled process Coordination framework, specifically the first dot entitled service description and transport binding (see the abstract service Description).

See the first paragraph on page 55, in which services use software components to enable dynamic interactions.

See the third paragraph on page 55, which uses a process coordination framework.

See the five dots on the top left side of page 59

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workflow further comprises a second plurality of tasks, and

wherein combining the first plurality of tasks comprises combining the second plurality of tasks into a second virtual task within the abstracted workflow

- 3. The method of claim 2 wherein linking the first virtual task to the first plurality of tasks comprises linking the second virtual task to the second plurality of tasks such that a virtual execution of the abstracted workflow corresponds to an actual execution of the workflow.
- 4. The method of claim 3 wherein analyzing the workflow comprises: determining that a last task within the first plurality of tasks precedes at most one subsequent task within the second plurality of tasks within the workflow.
- 5. The method of claim 4 wherein analyzing the workflow further comprises determining that no internal task within the first plurality of tasks, exclusive of the last task, immediately precedes an external task that is not included within the first plurality of tasks.
- 6. The method of claim 4 wherein analyzing the workflow further comprises determining that no internal task within the first plurality of tasks, exclusive of a first task of the first plurality of tasks, immediately succeeds an external task that is not included

See the second full paragraph on page 58, which indicates that "As figure 4 shows... ordering of transactions..."

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within the first plurality of tasks.

7. The method of claim 3 wherein analyzing the workflow comprises determining whether a plurality of conditions are met, and further wherein determining whether the plurality of conditions are met comprises:

inputting a selected task from the first plurality of tasks, the selected task being a first task of the first plurality of tasks; considering each succeeding task of the selected task until a last task of the first plurality of tasks is reached, wherein the last task precedes at most one subsequent task within the second plurality of tasks within the workflow;

determining that no internal task within the first plurality of tasks, exclusive of the last task, immediately precedes an external task that is not included within the first plurality of tasks;

and determining that no internal task within the first plurality of tasks, exclusive of the first task, immediately succeeds an external task that is not included within the first plurality of tasks.

8. The method of claim 7 further comprising: determining that the plurality of conditions are not met; considering a preceding task outside of the first plurality of tasks and preceding the first plurality of tasks within

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the workflow, the preceding task immediately preceding at least a first pair of tasks;

determining that the last task within the first plurality of tasks is immediately preceded by at least a second pair of tasks; and

defining a modified first plurality of tasks comprising the preceding task, the last task, and all intervening tasks.

- 9. The method of claim 8 wherein combining the first plurality of tasks comprises combining the modified first plurality of tasks into the first virtual task within the abstracted workflow.
- 10. The method of claim 1 wherein analyzing the workflow comprises selecting all task subsets of the workflow which, when used as the first plurality of tasks, allow the linking of the first virtual task to the first plurality of tasks.
- 11. The method of claim 1 wherein analyzing the workflow comprises: inputting a selected task from among the workflow; and determining a first subset of tasks inclusively preceding the selected task which, when used as the first plurality of tasks, allow the linking of the first virtual task to the first plurality of tasks.
- 12. The method of claim 11 further comprising determining a second subset of tasks inclusively succeeding the selected task which, when used as the first plurality of tasks, allow the

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linking of the first virtual task to the first plurality of tasks.

- 13. The method of claim 1 wherein analyzing the workflow comprises: expressing actual tasks within the first plurality of tasks as first vertices within a first matrix, wherein values of the first vertices within the first matrix are determined by actual dependencies between the tasks within the first plurality of tasks, and wherein combining the first plurality of tasks into a first virtual task further comprises expressing virtual tasks within the abstracted workflow as second vertices within a second matrix, wherein values of the second vertices within the second matrix are determined by virtual dependencies between the virtual tasks within the abstracted workflow.
- 14. The method of claim 13 wherein linking the first virtual task to the first plurality of tasks comprises replacing a selected plurality of the first vertices with a selected one of the second vertices.
- 15. The method of claim 13 wherein linking the first virtual task to the first plurality of tasks comprises replacing a selected one of the second vertices with a selected plurality of the first vertices.
- 16. The method of claim 1 wherein the first plurality of tasks within the workflow are confidential tasks associated with a first party, and wherein the abstracted workflow permits communications regarding the confidential tasks without

See the second paragraph on page 57 under the section entitled "Web Services Conversation Language".

See the first full paragraph on the right side of page 58, which provides for dynamically overriding (replacing) information.

See the end of the paragraph on page 56 that started on page 55 and the first dot on the right hand side of page 56.

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divulging the confidential nature of the confidential tasks.

In reference to claims 17-32, see the rejections of claim 1-16 above.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Chavis whose telephone number is (571) 272-3720. The examiner can normally be reached on M-F, 8:00am-4:30pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JC

John Chavis

Primary Examiner AU-2193

Joh Ch